

PATENT COOPERATION TREATY

PCT/JP2005/010999

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION CONCERNING
TRANSMITTAL OF COPY OF INTERNATIONAL
PRELIMINARY REPORT ON PATENTABILITY
(CHAPTER I OF THE PATENT COOPERATION
TREATY)
(PCT Rule 44bis.1(c))

Date of mailing (day/month/year)
28 December 2006 (28.12.2006)

To:

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Applicant's or agent's file reference
10003896WO01

IMPORTANT NOTICE

International application No.
PCT/JP2005/010999

International filing date (day/month/year)
09 June 2005 (09.06.2005)

Priority date (day/month/year)
11 June 2004 (11.06.2004)

Applicant

CANON KABUSHIKI KAISHA et al

The International Bureau transmits herewith a copy of the international preliminary report on patentability (Chapter I of the Patent Cooperation Treaty)

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PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

| | | | |
|--|--|--|------------------|
| Applicant's or agent's file reference 10003896WO01 | FOR FURTHER ACTION | | See item 4 below |
| International application No. PCT/JP2005/010999 | International filing date (<i>day/month/year</i>) 09 June 2005 (09.06.2005) | Priority date (<i>day/month/year</i>) 11 June 2004 (11.06.2004) | |
| International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237 | | | |
| Applicant CANON KABUSHIKI KAISHA | | | |

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

| | |
|--|---|
| <input checked="" type="checkbox"/> Box No. I | Basis of the report |
| <input type="checkbox"/> Box No. II | Priority |
| <input type="checkbox"/> Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> Box No. V | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input checked="" type="checkbox"/> Box No. VI | Certain documents cited |
| <input type="checkbox"/> Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> Box No. VIII | Certain observations on the international application |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis.2).

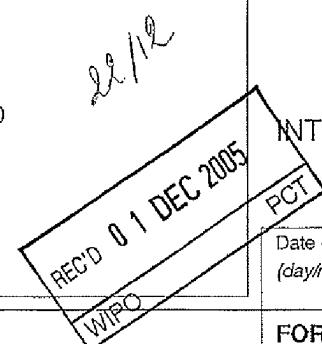
| | |
|---|--|
| Date of issuance of this report 14 December 2006 (14.12.2006) | |
| The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland | Authorized officer Masashi Honda e-mail: pt08@wipo.int |
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PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220



PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

| | | |
|---|--|---|
| Applicant's or agent's file reference see form PCT/ISA/220 | | Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet) |
| International application No. PCT/JP2005/010999 | International filing date (day/month/year) 09.06.2005 | Priority date (day/month/year) 11.06.2004 |
| International Patent Classification (IPC) or both national classification and IPC C08G63/688, C08G63/06, C08G63/91 | | |
| Applicant CANON KABUSHIKI KAISHA | | |

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

| | |
|--|--|
| Name and mailing address of the ISA:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016 | Authorized Officer Niaounakis, M Telephone No. +31 70 340-3818 |
|--|--|



WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/JP2005/010999

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or
industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|----------|
| Novelty (N) | Yes: Claims | 1,2,5-11 |
| | No: Claims | 3,4 |
| Inventive step (IS) | Yes: Claims | 1,2,5-11 |
| | No: Claims | 3,4 |
| Industrial applicability (IA) | Yes: Claims | 1-11 |
| | No: Claims | |

2. Citations and explanations

see separate sheet

Box No. VI Certain documents cited

1. Certain published documents (Rules 43bis.1 and 70.10)

and / or

2. Non-written disclosures (Rules 43bis.1 and 70.9)

see form 210

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/JP2005/010999

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

Reference is made to the following documents (D1-D3), especially to the passages referred to in the Search Report; the numbering will be adhered to in the rest of the procedure:

- D1: WO 2004/038512 A (CANON KABUSHIKI KAISHA; MIHARA, CHIEKO; YANO, TETSUYA; KOZAKI, SHINYA;) 6 May 2004 (2004-05-06)
- D2: WO 2004/044213 A (CANON KABUSHIKI KAISHA; KENMOKU, TAKASHI; YANO, TETSUYA; MIHARA, CHIEK) 27 May 2004 (2004-05-27)
- D3: EP-A-1 336 635 (CANON KABUSHIKI KAISHA) 20 August 2003 (2003-08-20)

D1 relates to a polyhydroxyalkanoate copolymer which contains a unit having a carboxyl group on a side chain which is similar to the side-chain of the polyhydroxyalkanoate of the present application (formula 5 of claim 3). In addition, the main-chain of D1 corresponds to the formula (5) of claim 3 for the case n=1.

Therefore, the subject-matter of claim 3 is not considered to be novel (Article 33(2) PCT).

D2 relates to a polyhydroxyalkanoate copolymer which contains a unit having a vinyl group on a side-chain which is similar to the side-chain of the polyhydroxyalkanoate of the present application (formula 6 of claim 4). In addition, the main-chain of D2 corresponds to the formula (6) of claim 4 for the case n=1.

Therefore, the subject-matter of claim 4 is not considered to be novel (Article 33(2) PCT).

On the other hand, the subject-matter of claims 5-11 is considered to be novel and inventive (Article 33(1)(2)(3) PCT).

D3 relates to a polyxyhydroxyalkanoate which contains a unit having an amide group and a sulfonic acid group on a side-chain. However, the structure of the side-chain of the polyhydroxyalkanoate of D3 is different from the side-chain of the polyhydroxyalkanoate of

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

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the present application (formula 1 of claim 1) because it contains additionally a sulfide group (-S-).

Therefore, the subject-matter of claims 1 and 2 is considered to be novel and inventive (Article 33(1)(2)(3) PCT).

Furthermore, all claims fulfill the requirements of industrial applicability (Article 33(4) PCT).